Science and War

In the magazine Science Dr. Peter L. Kapitza, a physicist whose name is identified with brilliant efforts to reach absolute zero, reviews the work done by Russian scientists to improve weapons and to find substitutes for much needed importations. His story parallels that which has been told by American and British scientists. If it departs from the familiar pattern it is because of its insistence on the highly practical character of Russian scientific research. Since science must serve the state in Russia, it has concerned itself with discoveries that can be applied in the factory, on the farm and in the hospital. Though this policy has made it difficult for the theorist to thrive, it is now bearing fruit in the form of highly efficient airplanes, improvements on old surgcal procedures and the better utilization of raw materials. Here and in Great Britain it was necessary to mobilize science for the war effort. Russian science was mobilized by the state from the very beginning, so that the change from peace to war research was easy.

Scientists Deplore War

Scientists deplore war not only because it diverts attention from the urgency of problems which, if solved, would conquer baffling diseases and shed much needed light on the structure of the universe, the nature of matter, the mystery of life, but also because it exploits science. Dr. Kapitza strikes a different note. As he sees it, science derives much inspiration from war. He makes much of the Haber process for synthesizing ammonia—a process which not only enabled Germany to stave off defeat during the last war but which gave her fertilizers. He might have gone farther. The laws of gravitation were derived from ballistics as much as from swinging pendulums. Studies of the gases liberated when guns are fired gave both chemistry and physics an enormous impetus. Blood banks and the control of typhus came out of war, and so did some of the new techniques for operating on the brain and for repairing head injuries.

It is worth noting that the only institutions where science was systematically taught during the eighteenth century were the artillery schools of France; that the heavy chemical industry was created when Leblanc met an urgent wartime need for soda; that the earliest sewing machine, that of Thimmonier, was first used in making uniforms; that synethic rubber, synthetic gasoline and the whole coal-tar chemical industry were developed by Germany with an eye on the inevitable British blockade. What gains science may make as the result of the present war no one can predict with certainty. Already it is clear that new plastics of startling properties will be developed, that a healthy synthetic rubber industry will be established and that new sythetic drugs will take the place of those which we have hitherto extracted from imported plants.

Name Schenley Employee As 'Typical Member' of Women's Defense Group

NEW YORK — A 24-year-old bride of less than a month whose husband is serving in the army and who works in the advertising department of Schenley Distillers corporation here has just been selected as the "typical member" of the National Security Women's Corps.

She is Elizabeth Bradbury, who as a member of the Schenley Unit of the Corps belongs to one of the organization's six units in New Jersey and New York.

Mrs. Vincent DiLeo in private life, Miss Bradbury devotes evenings and weekends to defense work and military training in the Corps. Its volunteer members are organized along military lines and trained to assist police, fire, air raid wardens and other civilian protective services during wartime emergencies.

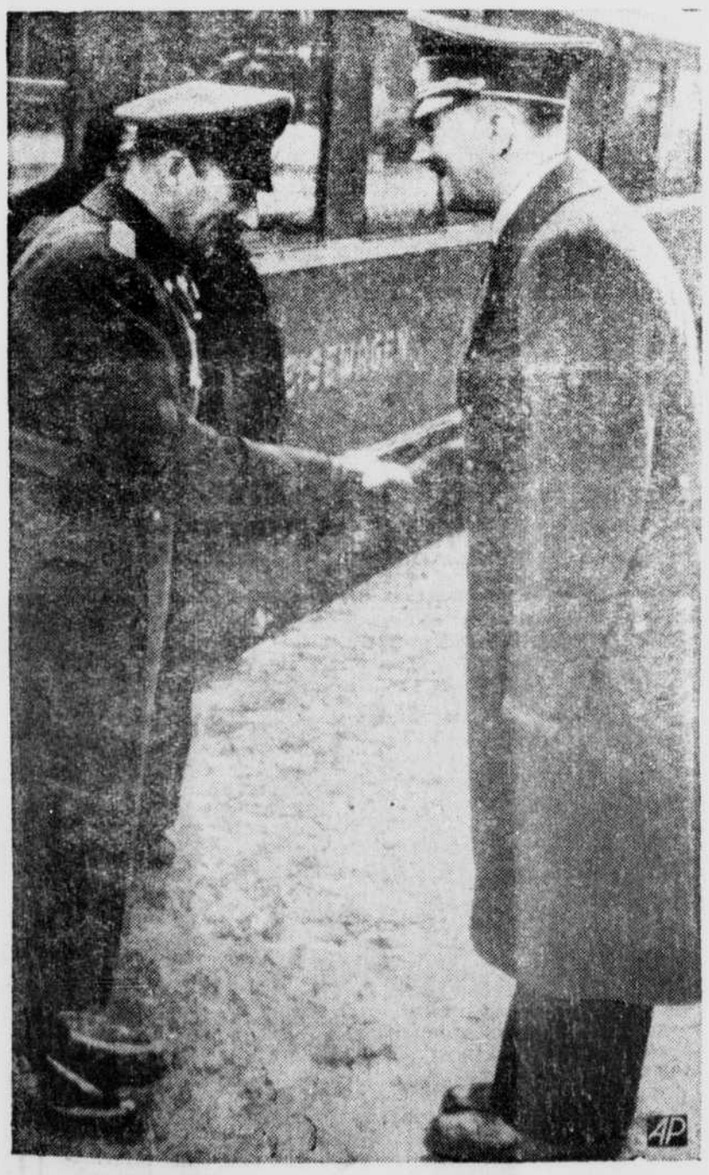
Miss Bradbury, wearing her Schenley unit uniform, will pose for a poster to be painted by Darrell Brown, recommended for the job by Howard Chandler Christy. She is five feet, eight inches tall, and has wavy brown hair and brown eyes.

Among factors that led to her being named were her proficiency in courses she has taken in first aid, motor mechanics and map reading.

AFRICAN WARRIORS WITHOUT GUNS

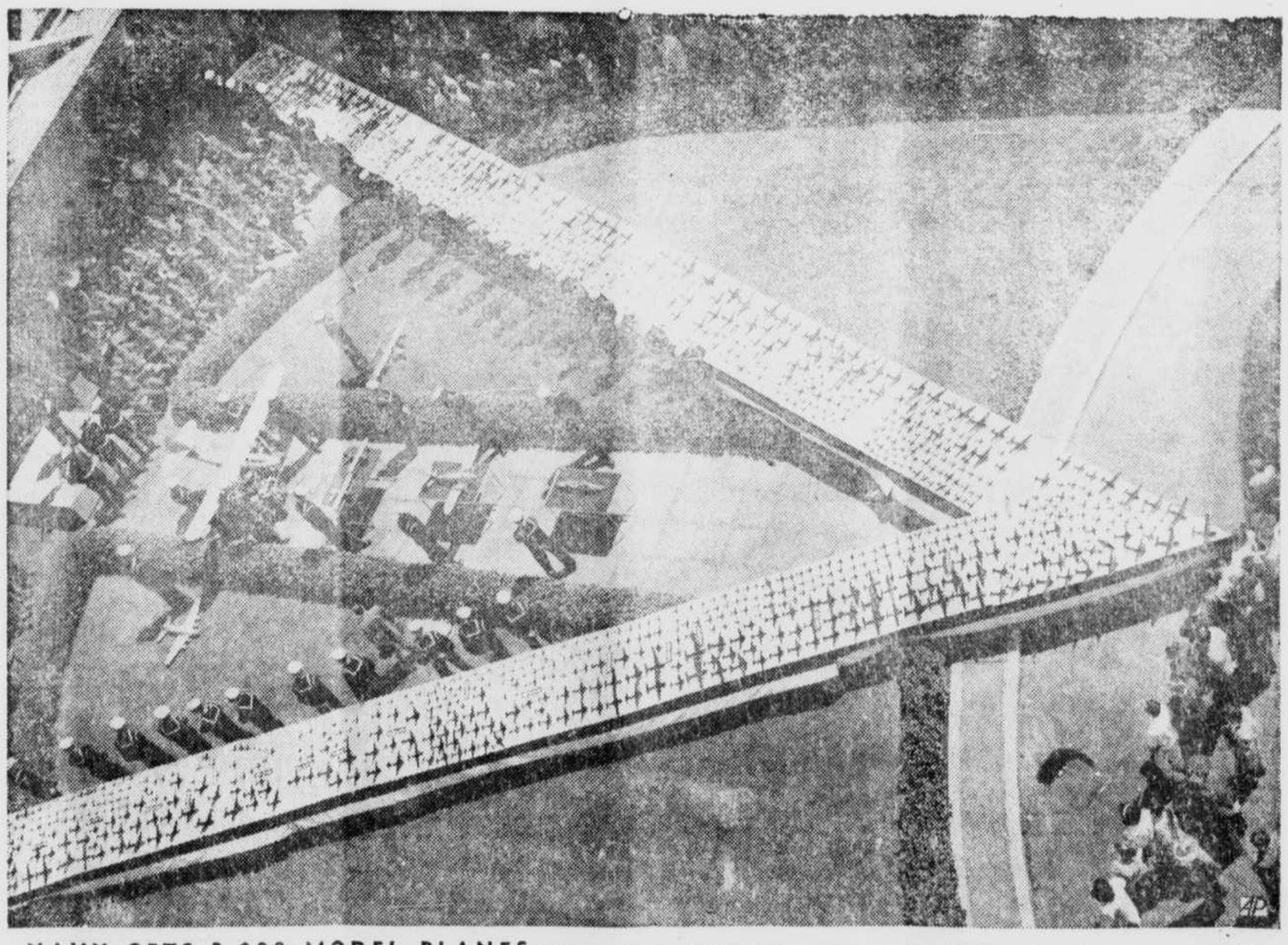
WARRIORS IN AFRICA—No one else can ever touch the blades used as bayonets by these fierce South African natives in Capetown area. Troops are not permitted to carry firearms.

BORIS OF BULGARIA BOWS TO HITLER



King Boris of Bulgaria bows his head as Hitler grasps his hand when the Bulgarian monarch went to Hitler's headquarters March 25, to have what the photographer who made this picture calls "A hearty chat about the questions interesting both nations. This picture, just received in the U. S., was aproved by German, Portuguese, British and U. S. censors.

MODEL PLANES FOR TRAINING NAVY PERSONNEL



NAVY GETS 2,000 MODEL PLANES—Displayed on a "V" shaped counter are about 2,000 scale model planes presented by Los Angeles high school students to the navy. The models will be used to train pilots, gunners and civilian observers.